



WCES-2011

# A comparison of peer bullying among high school students in Iran and Turkey

Abazar Cheraghi <sup>a\*</sup>, Metin Piskin <sup>b</sup><sup>a</sup>*University of Zencan, Iran*<sup>b</sup>*University of Ankara, Faculty of Educational Sciences, 06590, Cebeci - Ankara, Turkey*

---

## Abstract

The research consisted of 874 high school students from Iran and 859 students from Turkey. The “Bully-Victim Determination Scale Adolescent Form” developed by Pişkin & Ayas (2007) was used for Turkish students, whilst the adapted Persian version of the same instrument was used for Persian students. The results revealed that Iranian students were significantly more victimized in Physical victimization than their Turkish counterparts, whereas the Turkish students victimized more in isolation. However, the Turkish students had significantly higher scores than their Iranian counterparts in all bullying subscales. The data also revealed that males were significantly more victimized than females in any type of victimization and also significantly more bullied than females in any type of bullying. However, the 2-way interactions between country and gender showed that in most of the victimization subscales, Turkish males were more victimized than any groups followed by Iranian males. Turkish females were the least victimized group followed by Iranian females. The data also showed that general and vocational high school students did not differ either in victimization or in bullying.

© 2011 Published by Elsevier Ltd. Open access under [CC BY-NC-ND license](#).

**Keywords:** Bullying, victimization, Iran, Turkey, gender differences, general high school, vocational high school;

---

## 1. Introduction

It is likely that bullying has existed in schools for centuries. However, it received significant research attention after the work of Olweus (1978). Bullying is probably one of the most difficult and prevalent problems that our school today face (Orpinas & Horne, 2006), while all children have the right to have education in a safe environment.

In recent years, there is a growing number of researches conducted all over the world in order to understand the nature and prevalence of bullying and coping methods. Atik (2011) using the keywords “bully or bullying and schools,” to search the PsycINFO database, produced 1703 peer-reviewed articles fully published in journals from 1975 to 2010. Interestingly, most of papers (1458) were published after 2000. Similarly, a review of published articles and unpublished theses and dissertations in Turkish literature indicates that approximately 82 studies on bullying at school appeared after 2001. Almost 88% of them were conducted after 2005.

Although Cowie & Jennifer (2008) state that, there is no consensus regarding the definition of bullying, many researchers use Olweus’ definition. According to Olweus, bullying is “as a subset of aggressive behavior with

---

\* Metin Piskin. Tel.: +90 (312) 363 3350; fax: +90 (312) 363 6145

E-mail address: [metinpiskin@gmail.com](mailto:metinpiskin@gmail.com)

certain specific characteristics such that “a person is being bullied or victimized when he or she is exposed, repeatedly and over time, to negative actions on the part of one or more other students” (Olweus, 1993, p.9). Smith & Sharp’s (1994) definition of bullying is also popular in the field. They describe that bullying is “a systematic abuse of power” (p. 2). The key elements of these definitions are deliberate intention to harm another individual; repetition of the bullying behaviors over time; and an imbalance of power.

Different researchers categorized bullying differently. For example Olweus (1993) stated three types of bullying: physical, verbal, and social exclusion. Both physical and verbal bullying can be observed by outsiders therefore generally accepted as direct bullying whereas social exclusion is not always visible therefore it is accepted as indirect bullying. Rivers & Smith (1994) identified three types of bullying: direct physical, direct verbal and indirect bullying. Direct physical aggression involves tangible behaviors such as hitting, pushing, and kicking. Direct verbal aggression includes name-calling and threats. Indirect aggression involves behaviors such as spreading rumors and telling tales. Some researchers such as (Crick & Bigbee, 1998) call indirect bullying as relational bullying. Elliott (1997) classifies bullying as follows: physical, verbal, social exclusion, emotional, and sexual. Pişkin & Ayas (2011) classified bullying for primary school children in five categories: Physical, verbal, isolation, rumor spreading and harming properties; however they added (Pişkin ve Ayas, 2007) sexual bullying as being the sixth category for adolescents (middle schools and high schools).

A considerable number of researches have demonstrated the harmful effects of bullying on school children. Hawker & Boulton (2000), in their meta-analysis of 20 years’ research, found that victimization was strongly associated with depression, and moderately associated with loneliness, and low social and global self-esteem. The emotional effects of bullying can cause low self-esteem and confident (Besag, 1989; Pişkin & Ayas, 2005a).

Coie & Dodge (1998), Crick & Grotpeter (1995) state that bullies are more likely to experience social-psychological adjustment problems such as depression, loneliness and social isolation. The Social Care Institute of Excellence (2005) states that verbal, social, and psychological forms of bullying can drive a child to suicide having equal potency to modes of physical aggression. Berthold and Hoover, (2000) reported that students who are the target of bullying are also likely to avoid going to school because they fear for their safety.

There is also evidence that continued or severe bullying can contribute to long-term problems. For example, in his longitudinal research, Olweus (1991) found that boys who persistently bullied others in adolescence were three to four times more likely to be involved in repeated anti-social behavior and physical violence by their early twenties.

According to the World Health Organization, the prevalence of bullying is quite consistent across countries (Teachsafeschools.org.). Griffin & Gross (2004) state that figures vary widely, depending upon the definition and methodology used, and the applicable time frame (between 5 and 90% of students reporting they were victims of bullying). Olweus (1993), based upon survey data collated from 130,000 schoolchildren, found that 15% of those students attending elementary and secondary/junior high schools were involved in mobbing as either perpetrators or victims. In the United States, in a study of over 15,686 students attending public and private schools, Nansel, Overpeck, Pilla, Ruan, Simons-Morton & Scheidt (2001) found that 30% of sixth- through tenth-grade students said that they had moderate to frequent involvement in bullying at school with 13% reporting their role as bully and 10.6% as victims. The National Youth Violence Prevention Resource Center (2006) estimated that 30 percent of teens in the United States (over 5.7 million) are involved in bullying as a bully, a target of bullying, or both. Another recent and large scaled study conducted by Josephson Institute (2010) on over 45,000 students from 78 public and 22 private school students, aged between 15-18, revealed that about 50% of the students did bullying, and 47% of the students victimized at least in one type of bullying. In the UK, a nationwide survey of bullying conducted with 4,000 children aged 5 to 16, found that 68% of the children had been bullied at least once; 38% had been bullied at least twice (Elliott & Kilpatrick, 2002). Whitney & Smith (1993) found that 27% of the pupils in junior and middle schools were bullied – 10% indicated that they were bullied once a week. In Finland it was found that 11% the children were victimized and the same percent of them bullied others at least once a week (Kaltiala-Heino & Rimple, 1999). In Scotland, Karatzias, Power & Swanson, (2002) reported that 7.5% of the high school students were bully, 16.7% of the students were victims. Ndetel, Ongecha, Khasakhala, Syanda, Mutiso, Othieno (2007) reported that the prevalence of bullying in Kenya varied, depending on the type of bullying, from 63.2 to 81.8%. In Romania, Beldean-Galea, Jurcau & Tigan, (2010) found that 33.8% reported bullying others “*once a week or more often*”, 60.8% “*sometimes*” (once or twice and sometime), 40.5% reported being victimized “*once a week or more often*”,

55% „sometimes” (once or twice and sometimes). In South Cyprus, Stavrinides *et al.*, (2010) found that 5.4% of the students were only victim, 7.4% were only bully and 4.2% were bully-victim.

In a recent study, Fleming & Jacobsen (2010) amongst middle-school students in 19 low- and middle-income countries found that the percentage of victimized children varied between 41-60% in Botswana, Chili, Guyana, Kenya, Namibia, Swaziland, Uganda and Zimbabwe, varies between 20-43% in China, Lebanon, Morocco, Oman, Philippine, United Arab Emirates, Tanzania and Venezuela. In this research, Tajikistan was the only country where the percentage of victimized students was under 20%.

In another large scale international survey of 35 countries in Europe and North America, Due, Merlo, Harel-Fisch, Damsgaard, Holstein, Hetland (2009) demonstrated that the lowest prevalence occurred in Sweden (for girls 5.0; for boys, 6.3) and the highest in Lithuania (for girls 34.0; for 38.0).

Recently, a growing number of researches in Turkey investigated the prevalence of bullying in Turkish schools. Although most of the research has been carried out among primary school students, there has been some research conducted on high school level. Dölek (2002) found that the victimization level among 9<sup>th</sup> grade students was 11%. Pişkin & Ayas (2005b) studied 9<sup>th</sup> to 11<sup>th</sup> grade students and found that 20.5% of the students were victim, and 28.2% of them were bully. Akgün (2005) his study of high school preparation class, 9<sup>th</sup> and 10<sup>th</sup> grade children, found that the percentage of victims was 8.2, and the percentage of bullies was 7.2. Gültekin & Sayıl (2005) found that the percentage of victimized students was 13.9. Kepenekçi & Çinkır (2006) reported that 100% of the students were victimized at least once in the academic year. Alikasifoglu, Erginoz, Ercan, Uysal & Albayrak-Kaymak, (2007) in their large scale (N=3519) research on 9<sup>th</sup>, 10<sup>th</sup>, and 11<sup>th</sup> grade Turkish students stated that the percentage of victims was 22% whereas the percentage of bullies was 9.2%.

Many studies have pointed out that bullying and victimization incidences vary due to gender differences. Numerous researchers have reported that boys are more likely than girls to bully other students (Fekkes, Pijpers & Verloove-Vanhorick 2005; Nansel, *et al.*, 2001; Nordhagen, *et al.*, 2005; O'Moore & Hillery, 1989), nonetheless, a small number of studies found no significant gender differences (Kristensen & Smith, 2003; Peskin, Tortolero & Markham, 2006). In contrast to these findings, Beldean-Galea, Jurcau & Tigan, (2010) found that girls tend to bully others more often than boys.

Related to victimization the findings are diverse. Some researches reveal that the number of boys and girls being victimized is about the same (eg. Beldean-Galea, Jurcau & Tigan, 2010; Fekkes, Pijpers & Verloove-Vanhorick, 2005; Peskin, Tortolero & Markham, 2006), while others have found that more boys are victimized (eg. O'Moore & Hillery, 1989).

Due *et al.*, (2009), in their international survey of 35 countries found that in all countries except Greenland, Hungary, Scotland, Ukraine, and Wales, more boys than girls reported being victims of bullying, but in most countries gender differences were minor.

Some researchers state that boys perform and also were victimized more in forms of direct bullying such as physical bullying than girls (Card, Stucky, Sawalani & Little, 2008; Elliott (2002; Espelage, Bosworth, & Simon, 2000; Olweus, 1993; Rigby, 2007; Smith & Sharp, 2003) whereas girls enact and also were victimized more often in types of social/relational bullying (Borntrager, Davis, Bernstein, & Gorman, 2009; Price, 2004; Rigby, 2007).

Research in Turkey generally indicates that boys are more likely to bully others than girls and are often more victimized than girls (Dölek, 2002; Pekel, 2004; Pişkin & Ayas, 2005b; Takış, 2007). Some research conducted on secondary school children in Turkey, reporting only victimization results, indicated that boys bully others more often than girls did (Alikasifoglu, *et al.*, 2007; Malkoc & Ceylan, 2010; Sahin & Sari, 2010).

In the case of Iran, Mahemmedkani (2002) report that boys usually perform more physical bullying and criminal activities than girls, whereas girls bully others by verbal forms and rumor spreading.

Related to high school type differences, there is limited research comparing general and vocational high school students. Pişkin & Ayas (2005b) compared general high school, female's vocational high schools, and male's vocational high school students bullying and victimization level in Turkey. The data revealed that male vocational high school students were significantly more victimized than the students of the other two schools, whereas the bully level of female's vocational high school students were significantly lower than students of the other two schools.

Furthermore Pişkin & Ayas (in Press) examined peer bullying and victimization levels of students of industrial vocational high school, general high school, private high school and Anatolian high school. The results showed that the most victimized students were from vocational high school whereas private high school students composed the

group with higher bully incidents. The Anatolian high school students were the least victimized and also had the least number of bullies compared to the other groups.

Comparing coeducational and single sex schools in the incidence of bullying, Rigby (2007) stated that there are no consistent differences between the two types of schools in Australia.

The purpose of the study is to compare the level of peer bullying among Iranian and Turkish high school students. The bully and victim levels of students in both countries were examined according to gender and high school types.

## 2. Method

### Participants

The research group consisted of 874 Iranian and 859 Turkish high school students. The Iranian participants were attending “general” and “vocational” high school in Zencan city while the Turkish students were from Ankara’s high schools. Students from four schools at each country took part, two were general high schools and two were vocational high schools. Since in Iran there is no co-education in high schools, one general and one vocational high school for males and one general and one vocational high school for females were selected. However, in Turkey, all general-academic high schools are co-educational schools. Although in Turkey all vocational-technical high schools recently start to accept both males and females, some types of vocational high schools are attended by mostly males, whilst others mostly by females. In order to establish gender equivalence of Iranian and Turkish vocational schools, one vocational high school was selected from male dominant vocational schools, while the other was selected from female dominant vocational-technical schools.

The instruments were delivered to 900 students from each country; however the final data consist of 874 Iranian and 859 Turkish students because some students’ data were missing. In Iran 222 males and 224 females were from general-academic high schools and 210 males and 218 females were from vocational high school. In Turkey, 419 students were from two general-academic high schools while 219 males and 221 females from vocational-technical high schools.

### Instruments

The “Bully-Victim Determination Scale - Adolescent Form” developed by Pişkin & Ayas (2007) was used for the Turkish students, whilst the adapted Persian version of the same instrument was used for the Persian students.

The Bully-Victim Determination Scale – Adolescent Form consisted of two main scales; one is called “Bullying Scale” and the other “Victimization Scale”. The items in both scales are the same but the wording is different. In the Victimization Scale, students were asked to answer how often they were victimized by other students while in the Bullying Scale they were asked to answer how often they did bullying actions towards other students.

The scale was developed by Pişkin & Ayas (2007) in order to determine the bullying and the victimization levels of students, grades from 6<sup>th</sup> to 11<sup>th</sup>. The Bullying Scale and the Victimization Scale each consisted of 53 items and 6 factors as follow: Physical bullying/victimization, verbal bullying/victimization, isolation, rumor spreading, harming properties, and sexual bullying/victimization. The instrument gives also total bullying scores as well as victimization scores. The numbers of items of each subscale are as follow: physical: 15 items, verbal: 7 items, isolation: 6 items, rumor spreading: 5 items, harming properties: 10 items, and sexual: 10 items. The minimum score that can be taken from the Bullying Scale as well as Victimization Scale is 53, and the maximum score is 265. When the students’ score increases the bullying and victimization level increases, while when the score is low the bullying and victimization level is low. Pişkin & Ayas (2007) found the Cronbach Alpha correlation coefficients for Bullying Scales are as follow: Total Bullying Scale 0.92, Physical Bullying 0.83, Verbal Bullying 0.74, Isolation 0.75, Rumor Spreading 0.66, Harming Properties 0.79, and Sexual Bullying 0.88. The Cronbach Alpha reliability coefficients for the Victimization Scales are as follow: Total Victimization Scale 0.93, Physical Victimization 0.82, Verbal Victimization 0.75, Isolation 0.77, Rumor Spreading 0.75, Harming Properties 0.80, and Sexual Victimization 0.88.

However in this research only total, physical, verbal, isolation, and harming properties scales were used in comparing Iranian and Turkish students’ victimization and bullying levels. “The Sexual Bullying” and “the Sexual Victimization” scales were not used because we expected that we would not get permission from the Iranian

Authorities to apply the instruments in Iran. Furthermore, after conducting a factor analysis, we found that the Rumor Spreading scale had lower validity scores for Iranian students and we decided to exclude this subscale as well. After the exclusion of Sexual and Rumor Spreading subscales and related items, the factor analysis for the remaining four subscales and the total scales as well as the reliability of the shorten instrument for Iranian students were calculated again.

The results indicated that the Iranian version of the instruments' Cronbach Alpha reliability coefficients of Bullying Scales varied between 0.70 (Verbal Bullying) to 0.84 (Total Bullying Scale). Furthermore test-retest reliability was calculated after a 10 days interval on 400 students. The results showed that the test-retest reliability coefficients of the Bullying Scales for Iranian students varied between 0.73 (Harming Properties) to 0.89 (Physical Bullying). The Cronbach Alpha reliability coefficients of the Victimization Scales varied from 0.61 (Harming Properties) to 0.84 (Total Victimization Scale). The test-retest reliability of the Victimization Scales varied from 0.75 (Harming Properties) to 0.90 (Physical Victimization).

Since Iranian students were to use the shortened version of the instruments (37 items), it was decided that the Turkish students should also use the same shortened instrument as well. In order to ensure the reliability and validity of the shortened Turkish version of the instrument, the reliability and validity of the new instrument for Turkish students was calculated again. The results of the confirmatory factor analysis showed that the validity of the instrument was good enough. Cronbach Alpha reliability coefficients of the Victimization Scales were as follow: Physical Bullying Scale 0.77, Verbal Bullying Scale 0.45, Isolation 0.72, Harming Properties Scale 0.68, and the Total Bullying Scale 0.77. The Cronbach Alpha interval reliability coefficients for Victimization scales have as follow: Physical Victimization Scale 0.77, Verbal Victimization Scale 0.53, Isolation 0.58, Harming Properties Scale 0.76, and the Total Victimization Scale 0.75. The results indicated that although the shorten version of the Turkish instruments' reliability coefficients is lower than the Iranian version, the reliability of the instruments are at acceptable level.

### 3. Findings and Results

The means and standard deviations on the Total Victimization scale as well as the other victimization subscales for Iranian and Turkish students are shown in Table 1.

Table 1: Comparison of Iranian and Turkish Students' victimization by gender

	Gender	IRAN		TURKEY		TOTAL		Country	Gender	Country X Gender	
		Mean	SD	Mean	SD	Mean	SD	F (1,1720) (P)	F(1,720) (P)	F (1,721) (P)	Post hoc‡
Total Victimization	Male	164.27	17.73	168.11	15.02	166.20	16.53	0.12 (p<.733)	75.91 (p<.001)	17.16 (p<.001)	TM>IM>IF>TF
	Female	159.65	20.41	155.12	28.59	157.48	24.77				
	Total	161.91	19.28	161.54	23.61						
Physical Victimization	Male	65.00	8.49	65.90	8.00	65.45	8.25	9.07 (p<.003)	83.70 (p<.001)	23.44 (p<.001)	TM=IM>IF>TF
	Female	62.89	9.47	59.05	13.80	61.05	11.90				
	Total	63.92	9.06	62.46	11.76						
Verbal Victimization	Male	29.64	5.03	30.97	4.81	30.31	4.96	.780 (p<.377)	36.66 (p<.001)	16.79 (p<.001)	TM>IM=IF>TF
	Female	29.11	5.12	28.25	7.06	28.70	6.14				
	Total	29.37	5.08	29.60	6.15						
Isolation	Male	27.02	3.95	28.31	3.13	27.67	3.62	16.23 (p<.001)	26.63 (p<.001)	5.49 (p<.019)	TM>TF=IM=IF
	Female	26.45	4.32	26.79	5.18	26.61	4.75				
	Total	26.73	4.15	27.52	4.31						
Harming Properties	Male	42.62	3.73	42.94	3.60	42.78	3.67	.09 (p<.759)	45.16 (p<.001)	.978 (p<.323)	-
	Female	41.20	5.60	41.03	6.90	41.12	6.25				
	Total	41.89	4.83	41.96	5.53						

‡ Abbreviations used for the post hoc analysis (TM= Turkish Male; TF= Turkish Female; IM= Iranian Male; IF= Iranian Female)



The results of a two-way (country by gender) ANOVA between subjects showed that there was no significant main effect of the parameter country in Total Victimization scores, in Verbal Victimization, and in Harming Properties. However, there is significant main effect of the country both in Physical Victimization ( $F(1,1720)=9.07; p<0.03$ ) and Isolation ( $F(1,1720)=27.52; p<0.000$ ) demonstrating that the Iranian students were significantly more victimized physically than their Turkish counterparts, whereas the Turkish students were more isolated than the Iranian students.

In reference to ANOVA analyses, there are significant main effects of gender in Total Victimization ( $F(1,1720)=75.91; p<0.000$ ), Physical Victimization ( $F(1,1720)=83.70; p<0.000$ ), Verbal Victimization ( $F(1,1720)=36.66; p<0.000$ ), Isolation ( $F(1,1720)=26.63; p<0.000$ ), and Harming Properties ( $F(1,1720)=45.16; p<0.000$ ) indicating that males were significantly more victimized than females in any of the victimization subscales.

The results of 2x2 factorial design ANOVA analyses, presented in Table 1, showed that the 2-way interactions between country and gender reached a significant level in Total Victimization ( $F(1,1720)=17.16; p<0.000$ ), Physical Victimization ( $F(1,1720)=23.44; p<0.000$ ), Verbal Victimization ( $F(1,1720)=16.79; p<0.000$ ), and Isolation ( $F(1,1720)=5.49; p<0.019$ ).

The Post hoc analyses for significant interaction effects conducted by using the Tukey multiple comparison tests showed that in Total Victimization Scale, Turkish males were significantly more victimized than Turkish females as well as Iranian males and females. Furthermore, Iranian males were significantly more victimized than Iranian and Turkish females, and Iranian females were significantly more victimized than Turkish females. Post hoc test results also showed that in Physical Victimization, Turkish and Iranian males were significantly more victimized than were Turkish and Iranian females. In Verbal Victimization, Turkish males were significantly more victimized than Turkish females as well as Iranian males and females. Furthermore, Iranian males and females were significantly more victimized than were Turkish females. In Isolation, the results revealed that Turkish males were significantly more victimized than Turkish females as well as Iranian males and females.

The means and standard deviations on the Total Bullying Scale as well as the other bullying subscales for Iranian and Turkish students are shown in Table 2. The results of a two-way (country by gender) ANOVA between subjects showed that there is a significant main affect of country in Total Bullying ( $F(1,1720)=21.94; p<0.000$ ) in Physical Bullying ( $F(1,1720)=7.38; p<0.007$ ), in Verbal Bullying ( $F(1,1720)=31.57; p<0.000$ ), in Isolation ( $F(1,1720)=30.67; p<0.000$ ), and in Harming Properties ( $F(1,1720)=11.30; p<0.001$ ) indicating that Turkish students had significantly higher scores than their Iranian counterparts in Total Bullying Scale as well as in all other bullying subscales.

Table 2: Comparison of Iranian and Turkish Students' bullying by gender

	Gender	IRAN		TURKEY		TOTAL		Country	Gender	Country X Gender	Post hoc
		Mean	SD	Mean	SD	Mean	SD	$F(1,1720)$ (P)	$F(1,720)$ (P)	$F(1,721)$ (P)	
Total Bullying	Male	170.50	15.53	175.44	12.16	172.98	14.15				
	Female	162.23	21.81	165.99	24.98	164.04	23.44	21.94 (p<.001)	91.10 (p<.001)	.40 (p<.526)	-
	Total	166.27	19.44	170.66	20.00						
Physical Bullying	Male	67.80	7.52	69.76	6.83	68.78	7.25				
	Female	64.22	9.84	64.71	12.28	64.45	11.07	7.38 (p<.007)	92.02 (p<.001)	2.67 (p<.102)	-
	Total	65.97	8.96	67.22	10.18						
Verbal Bullying	Male	31.12	4.81	32.72	3.87	31.92	4.43				
	Female	29.43	5.78	30.65	6.10	30.01	5.97	31.57 (p<.001)	55.98 (p<.001)	.55 (p<.458)	-
	Total	30.25	5.39	31.69	5.16						
Isolation	Male	27.84	3.18	28.77	2.54	28.31	2.91				
	Female	26.80	4.04	27.79	4.35	27.28	4.22	30.67 (p<.001)	34.03 (p<.001)	.03 (p<.866)	-
	Total	27.31	3.68	28.26	3.56						
Harming Properties	Male	43.74	3.18	44.19	2.66	43.96	2.94				
	Female	41.78	6.03	42.84	5.72	42.29	5.90	11.30 (p<.001)	54.21 (p<.001)	1.85 (p<.175)	-
	Total	42.74	4.95	43.49	4.46						

The results of ANOVA analyses showed that there are also significant main effects of gender in Total Bullying ( $F(1,1720)=91.10;p<000$ ), in Physical Bullying ( $F(1,1720)=92.02;p<000$ ), in Verbal Bullying ( $F(1,1720)=55.98;p<000$ ), in Isolation ( $F(1,1720)=34.03;p<000$ ), and in Harming Properties ( $F(1,1720)=54.21;p<000$ ). In this case, the scores of males were significantly higher than females in any of the bullying subscales. However, a 2-way interaction between country and gender did not reach a significant level in any of the bullying subscales.

The means and standard deviations on the Total Victimization Scale as well as the other victimization subscales for Iranian and Turkish students according to high school type are displayed in Table 3. ANOVA tests showed that there is no significant main effects of school type neither for Total Victimization Scale nor for any of the victimization subscales. Accordingly, we can conclude that there is no difference between general high school and vocational high school students in any type of victimization.

A 2-way interaction test between country and school type did reach a significant level in Total Victimization ( $F(1,1720)=6.86;p<009$ ), in Physical Victimization ( $F(1,1720)=8.23;p<004$ ), and in Verbal Victimization ( $F(1,1720)=9.34;p<002$ ). The Post hoc analyses for significant interaction effects conducted by using the Tukey multiple comparison tests showed that in Total Victimization Scale, Iranian Vocational high school students were significantly more victimized than the Iranian General high school students. The data also confirmed that Iranian vocational high school students were significantly more victimized than the Turkish vocational high school students in Physical Victimization Subscale. In addition, Turkish general high school students were significantly more victimized than Iranian general high school students in Verbal Victimization Subscale.

The means and standard deviations on the Total Bullying Scale as well as the other bullying subscales for Iranian and Turkish students according to high school type are shown in Table 4. The results of ANOVA illustrated that, similar to victimization, there is no significant main effects of school type neither for Total Bullying Scale nor for any of the bullying subscales indicating that there is no difference between general high school and vocational high school students in any type of bullying.

However, a 2-way interaction between country and school type reached a significant level in Physical Bullying Subscale ( $F(1,1720)=4.54;p<033$ ). The post hoc analysis for significant interaction effects conducted by using the Tukey multiple comparison tests indicated that Turkish general high school students had significantly higher scores than Iranian general high school students in the Physical Bullying Subscale.

Table 3: Comparison of Iranian and Turkish Students' victimization by school type

	School Type	IRAN		TURKEY		TOTAL		Country	School Type	Country x School Type	Post hoc‡
		Mean	SD	Mean	SD	Mean	SD	$F(1,1720)$ ( <i>P</i> )	$F(1,720)$ ( <i>P</i> )	$F(1,721)$ ( <i>P</i> )	
Total Victimization	General	160.27	20.03	162.85	22.64	161.48	21.32	.02 ( <i>p</i> <.897)	.38 ( <i>p</i> <.536)	6.86 ( <i>p</i> <.009)	IV>IG
	Vocational	163.62	18.33	160.78	24.40	162.17	21.67				
	Total	161.91	19.28	161.54	23.61						
Physical Victimization	General	63.08	9.27	63.16	11.42	63.12	10.33	7.34 ( <i>p</i> <.007)	.32 ( <i>p</i> <.572)	8.23 ( <i>p</i> <.004)	IV>TV
	Vocational	64.81	8.77	62.00	11.98	63.38	10.61				
	Total	63.92	9.06	62.46	11.76						
Verbal Victimization	General	28.99	4.88	30.11	5.68	29.51	5.30	1.12 ( <i>p</i> <.289)	.04 ( <i>p</i> <.842)	9.34 ( <i>p</i> <.002)	TG>IG
	Vocational	29.76	5.26	29.22	6.55	29.49	5.95				
	Total	29.37	5.08	29.60	6.15						
Isolation	General	26.59	4.22	27.72	4.18	27.12	4.24	17.04 ( <i>p</i> <.001)	.00 ( <i>p</i> <.969)	2.05 ( <i>p</i> <.152)	-
	Vocational	26.87	4.08	27.42	4.45	27.15	4.28				
	Total	26.73	4.15	27.52	4.31						
Harming Properties	General	41.62	5.34	41.86	5.72	41.73	5.52	.15 ( <i>p</i> <.695)	2.81 ( <i>p</i> <.094)	.34 ( <i>p</i> <.559)	-
	Vocational	42.18	4.21	42.13	5.39	42.16	4.85				
	Total	41.89	4.83	41.96	5.53						

‡ Abbreviations used for the post hoc analysis (TG= Turkish General High School Students; TV= Turkish Vocational High School Students; IG= Iranian General High School Students; IV= Iranian Vocational High School Students)

Table 4: Comparison of Iranian and Turkish Students' bullying by school type

	School Type	IRAN		TURKEY		TOTAL		Country	School Type	Country x School Type	Post hoc‡
		Mean	SD	Mean	SD	Mean	SD	F (1,1720) (P)	F (1,720) (P)	F (1,721) (P)	
Total Victimization	General	165.43	19.76	171.51	18.19	168.29	19.26	22.92 (p<.0001)	.05 (p<.830)	2.52 (p<.112)	-
	Vocational	167.15	19.08	170.20	21.60	168.70	20.45				
	Total	166.27	19.44	170.66	20.00						
Physical Victimization	General	65.42	9.06	67.73	9.65	66.51	9.41	8.27 (p<.004)	.09 (p<.766)	4.54 (p<.033)	TG>IG
	Vocational	66.54	8.83	66.89	10.65	66.72	9.79				
	Total	65.97	8.96	67.22	10.18						
Verbal Victimization	General	30.02	5.29	31.83	4.99	30.87	5.22	32.43 (p<.001)	.22 (p<.643)	1.90 (p<.168)	-
	Vocational	30.49	5.50	31.60	5.36	31.06	5.45				
	Total	30.25	5.39	31.69	5.16						
Isolation	General	26.59	4.22	27.72	4.18	27.12	4.24	31.40 (p<.001)	.09 (p<.763)	.24 (p<.627)	-
	Vocational	26.87	4.08	27.42	4.45	27.15	4.28				
	Total	27.31	3.68	28.26	3.56						
Harming Properties	General	42.74	4.70	43.63	4.00	43.16	4.40	12.19 (p<.001)	.21 (p<.646)	.16 (p<.688)	-
	Vocational	42.73	5.19	43.43	4.87	43.09	5.04				
	Total	42.74	4.95	43.49	4.46						

‡ Abbreviations used for the post hoc analysis (TG= Turkish General High School Students; TV= Turkish Vocational High School Students; IG= Iranian General High School Students; IV= Iranian Vocational High School Students)

#### 4. Discussion

The comparison of Iranian and Turkish students in victimization revealed that there are no major differences between two countries. A few differences were only observed: Iranian students were significantly more victimized than their Turkish counterparts in Physical victimization, whereas the Turkish students victimized more isolated than the Iranian students. In addition, Turkish students had significantly higher scores than their Iranian counterparts in all bullying scales.

The differences between Iran and Turkey might be related to each nation's school systems and school environments.

Furthermore, all Iranian students attend single sex schools whereas Turkish students attend co-educational schools. This may have contributed to these differences of attitude, although Rigby (2007) states that co-education and single sex school did not differ largely in terms of bullying and victimization in Australia. Differences among these results may be attributed to methodological and cultural differences and linguistic issues concerning that Turkish student answered the instrument that was developed for Turkish children, whereas the Iranian students answered the translated and adapted instrument. Furthermore, when the instruments were applied to the Turkish students the researchers were presented in each classroom and delivered all necessary explanation, while when collecting data in girls' schools in Iran the researchers were not allowed in classrooms since males cannot enter girls' schools.

In terms of gender differences, the data revealed that males were significantly more victimized than females in any type of victimization and also they bullied significantly more often than females in any type of bullying. In the 2-way interactions between country and gender showed that and in most of the victimization subscales, the Turkish males were more victimized than any groups, followed by Iranian males. Turkish females were the least victimized group followed by Iranian females.

The finding of gender differences is consistent with studies in several countries (Delfabro et al., 2006; Elliott, 1992; Kaltiala- Heino & Rimple, 1999; Mouttapa et al., 2004) and also in line with most of the Turkish studies (Dölek, 2002; Malkoç & Ceylan, 2010; Pekel, 2004; Pişkin ve Ayas, 2005b; Pişkin & Ayas, in press), Şahin & Sarı, 2010; Takış, 2007).



However, there are reports to the contrary which has showed that girls performed and also were victimized more than boys in social/relational bullying/victimization (Borntrager, Davis, Bernstein, & Gorman, 2009; Price, 2004; Rigby (2007).

These findings may be related to the concept of how traditional gender roles are to be acted. Male aggressiveness tends to be easier accepted than female aggressiveness both, in Turkey and Iran. The underlying reason for this gender differences, however, is unclear. As Card, Stucky, Sawalani & Little (2008) underline biological or social forces may jointly promote both forms of aggression among boys, but one form or the other among girls. More research should be conducted to understand the reasons explaining the gender differences in bullying and victimization.

In terms of school type differences, the data showed that general and vocational high school students did not differ in any type of victimization as well as bullying scales. There is a limited number of studies in bullying literature comparing general (academic) and vocational (technical) high school students. The results of current research is not in consensus with a previous Turkish study (Pişkin & Ayas, in press) conducted to find out differences among students attending different types of high schools. This research showed that the most victimized students were from vocational high schools. One more research, conducted in Taiwan (Chen & Astor, 2011) contradicts our results showing that students in vocational high schools have higher rates of school violence perpetration compared to those in academic high schools.

## 5. Conclusions

The current research is the first one to compare bullying and victimization level of Iranian and Turkish students. Probably one of the a few studies conducted among Iranian students and one of the a few studies comparing Turkish students with students of another country. The findings revealed the major difference as that Turkish high school students are more bullied than their Iranian counterparts. The current research suggests that even if few differences are found between the two countries, bullying is a problem in both, prevailing amongst males.

Several limitations of the study should be noted. The data gathered were based on information provided by students in only four secondary schools in Ankara, Turkey, and four secondary schools in Zencan, Iran. Therefore these samples are far from truly representative of the possible situation in Iran and Turkey. In order to comprehensively understand the scope of peer bullying in Iran and Turkey, future research needs to be conducted in large scale studies in both countries. Furthermore, only self-report methods were used in the current study.

## References

- Akgün S. (2005). *Akran zorbalığının anne-baba tutumları ve anne-baba ergen ilişkisi açısından değerlendirilmesi [Assessment of peer bullying with relation to parent attitude and parent-adeolecent relationships]* (Unpublished master's thesis). Hacettepe University, Istanbul, Turkey.
- Alikasifoglu, M., Erginoz, E., Ercan, O., Uysal, Ö. & Albayrak-Kaymak, D. (2007). Bullying behaviours and psychosocial health: Results from a cross-sectional survey among high school students in Istanbul, Turkey. *European Journal of Pediatrics*, 166:1253–1260.
- Atik, G. (2011). *Assessment of School Bullying in Turkey: A Critical Review of Self-Report Instruments. Paper presented at the 3<sup>rd</sup> World Conference on Educational Sciences*. Istanbul: Bahcesehir University, 4-7 February 2011).
- Beldean-Galea, I. E., Jurcau, N. & Tigan, S. I. (2010). Frequency of bullying behaviours in secondary schools in cluj-napoca. *Applied Medical Informatics*, 27, 4, 66-66.
- Berthold, K. A., & Hoover, J. H. (2000). Correlates of bullying and victimization among intermediate students in the Midwestern USA. *School Psychology International*, 21, 65-78.
- Besag, V. (1989). *Bullies and Victims in Schools*. London: Open University Press.
- Borntrager, C., Davis, J. L. Bernstein, A. & Gorman, H. (2009). A cross-national perspective on bullying. *Child Youth Care Forum*, 38, 121–134.
- Card, N. A., Stucky, B. D., Sawalani, G. M. & Little, T.D. (2008). Direct and indirect aggression during childhood and adolescence: A meta-analytic review of gender differences, intercorrelations, and relations to maladjustment, *Child Development*, 79, 5, 1185 – 1229.
- Chen, J. K. & Astor, R. A. (2011). The perpetration of school violence in Taiwan: An analysis of gender, grade level and school type. *School Psychology International*, 30, 568-584.
- Coie, J. D. & Dodge, K. A. (1998) Aggression and anti-social behavior, in W. Damon & N. Eisenberg (eds.) *Handbook of Child Psychology: Vol. 3. Social, Emotional and Personality Development* (5th ed.) (pp. 779–862). New York: John Wiley & Sons, Inc.
- Cowie, H. & Jennifer, D. (2008). *New Perspectives on Bullying*. Open University Press.
- Crick, N. R. & Bigbee, M. A. (1998). Relational and overt forms of peer victimization: A multi informant approach. *Journal of Consulting and Clinical Psychology*, 66, 337- 347.
- Crick, N. R. & Grotpeter, J. K. (1995) Relational aggression, gender, and social psychological adjustment, *Child Development*, 66: 710–22.

- Delfabro, P., Winefield, T., Trainor, S., Dollard, M., Anderson, S., Metrez, J. & Hammarstrom, A. (2006). Peer and teacher bullying/victimization of South Australian secondary school students: prevalence and psychosocial profiles. *British Journal of Education Psychology*, 76, 71–90.
- Dölek, N. (2002). İlk ve orta öğretim okullarındaki öğrenciler arasında zorbaca davranışların incelenmesi ve zorbalığı önleme tutumu geliştirilmesi programının etkisinin araştırılması [An investigation of bullying behaviors among elementary and high school students and the effect of program developing bullying prevention attitudes] (Unpublished doctoral dissertation). Marmara University, Istanbul, Turkey.
- Due, P., Merlo, J., Harel-Fisch, Y., Damsgaard, M.T., Holstein, B. E., Hetland, J., ... Lynch, J. (2009). Socioeconomic inequality in exposure to bullying during adolescence: A comparative, cross-sectional, multilevel study in 35 countries. *American Journal of Public Health*, 99, 5, 907–914.
- Elliott, M. (1992). *Bullying: A practical Guide to Coping for Schools*. Harlow: Longman Group UK.
- Elliott, M. (1997). *101 Ways to Deal with Bullying*. London: Hodder Children's Book.
- Elliott, M. (2002). Bullies and victims. In: M. Elliott (Ed.), *Bullying: A Practical Guide to Coping for Schools*. (pp.1-11). Pearson Education Limited.
- Elliott, M. & Kilpatrick, J. (2002) *How to Stop Bullying: A Kidscape Training Guide*. Kidscape.
- Espelage, D. L., Bosworth, K., & Simon, T. R. (2000). Examining the social context of bullying behaviors in early adolescence. *Journal of Counseling and Development*, 78, 326–333.
- Fekkes, M., Pijpers, F. & Verlove-Vonherick, S. P. (2004). Bullying behavior and associations with psychosomatic complaint and depression in victims. *The Journal of Pediatrics*, 144, 1, 17–22.
- Fleming, L.C. & Jacobsen, K. H. (2010). Bullying among middle-school students in low and middle income countries. *Health Promotion International Advance*, 25, 1, 73–84.
- Griffin, R., & Gross, A. (2004). Childhood bullying: Current empirical findings and future directions for research. *Aggression and Violent Behavior*, 9, 379–400.
- Gültekin, Z., & Sayıl, M. (2005). Akran zorbalığı belirleme ölçeği geliştirme çalışması [A study of the reliability and validity of the Peer Victimization Scale]. *Türk Psikoloji Yazıları*, 8(15), 47–61.
- Hawker, D. S. J. & Boulton, M. J. (2000) Twenty years' research on peer victimization and psychosocial maladjustment: a meta-analytic review of cross-sectional studies, *Journal of Child Psychology and Psychiatry*, 41, 4, 441–55.
- Josephson Institute (2010). Josephson Institute's Report Card on the Ethics of American Youth Bullying and Other At-Risk Behavior. , <http://josephsoninstitute.org/>
- Kaltiala-Heino, R., Rimpela, M., Marttunen, M., Rimpela, A. & Rantanen, P. (1999). Bullying, depression, and suicidal ideation in Finnish adolescents: school survey. *British Medical Journal*, 319, 348–351.
- Karatzias, A., Power, K.G. & Swanson, V. (2002). Bullying and victimization in Scottish secondary schools: Same or separate entities? *Aggressive Behavior* 28, 45–61.
- Kepenekçi, Y. & Çınkır, Ş. (2006). Bullying among Turkish high school students. *Child Abuse & Neglect*, 30, 193–204.
- Kristensen S. M. & Smith, P. K. (2003) The use of coping strategies by Danish children classed as bullies, victims, bully/victims, and not involved, in response to different (hypothetical) types of bullying. *Scandinavian Journal of Psychology*, 44:479–488.
- Mahemmedkani, P. (2002). *Peer Bullying among Iranian Schools* <http://www.e-community-Journal-com>
- Malkoç, T. & Ceylan, F. (2010). Ortaöğretim 9. ve 10. sınıf öğrencilerinin zorbalık eğilimleri ve zorbalıkla başetme düzeyleri arasındaki ilişkide müzik eğitiminin önemi. [Bullying among 9<sup>th</sup> and 10<sup>th</sup> grade children and the importance of music education with coping with bullying] “Paper presented at the International Conference on New Trends in Education and Their Implications”. Antalya: 11-13 November 2010, Turkey.
- Mouttapa, M., Valente, T., Gallaher, P., Rohrbach, L. A. & Unger, J. B. (2004). Social network predictors of bullying and victimization. *Adolescence*, 39, 315–336.
- Nansel, Tr., Overpeck, M., Pilla, Rs., Ruan, Wj., Simons-Morton, B. & Scheidt, P. (2001). Bullying behaviors among US youth: prevalence and association with psychosocial adjustment. *Journal of the American Medical Association* 285, 2094–2100.
- National Youth Violence Prevention Resource Center (2006). Bullying. Available at [www.safeyouth.org/scripts/teens/bullying.asp](http://www.safeyouth.org/scripts/teens/bullying.asp).
- Ndetel, D.M., Ongecha, F.A., Khasakhala, L., Syanda, J., Mutiso, V., Othieno, C.J. ... Kokonya, D.A. (2007). Bullying in public secondary schools in Nairobi, Kenya. *Journal of Child and Adolescent Mental Health*, 19, 1, 45–55.
- Nordhagen, R., Nielsen, A., Stigum, H. & Köhler, L.(2005). Parental reported bullying among Nordic children: A population-based study. *Child Care Health & Development*, 31, 6, 693–701.
- O'Moore, A. M. & Hillery, B. (1989). Bullying in Dublin schools. *Irish Journal of Psychology*, 10, 426–441.
- Olweus, D. (1978) *Aggression in Schools: Bullies and Whipping Boys*. Washington, DC: Hemisphere.
- Olweus, D. (1991) Bully/victim problems among schoolchildren: basic facts and effects of a school based intervention program, in D. J. Pepler & K. H. Rubin (eds.), *The Development and Treatment of Childhood Aggression*: (pp. 411–48). Hillsdale, NJ: Lawrence Erlbaum.
- Olweus, D. (1993). *Bullying at School: What We Know and What We Can Do*. Oxford, UK: Blackwell.
- Orpinas, P. & Horne, A. M. (2006). *Bullying Prevention: Creating a Positive School Climate and Developing Social Competence*. American Psychological Association
- Pekel, N. (2004). Akran Zorbalığı Grupları Arasında Sosyometrik Statü, Yalnızlık Ve Akademik Başarı Durumlarının İncelenmesi. [An investigation of sociometric status, loneliness and academic achievement among peer bullying groups] (Unpublished master's thesis). Hacettepe University, Ankara, Turkey.
- Peskin, M. F., Tortolero, S. R. & Markham, C. M. (2006). Bullying and victimization among Black and Hispanic adolescents. *Adolescence*, 41, 163, 467–484.
- Pişkin, M. & Ayas, T. (2005a). Zorba ve kurban öğrencilerin utangaçlık, içedönüklük, dışadönüklük ve özsaygı değişkenleri bakımından incelenmesi. [Investigation of shyness, introvertedness and self-esteem among bully and victim students]. Paper presented at the 8<sup>th</sup> National Counseling and Guidance Congress. Istanbul: Marmara University (21–23 September 2005), Turkey.

- Pişkin, M. & Ayas, T. (2005b). *Lise Öğrencileri Arasında Yaşanan Akran Zorbalığı Olgusunun Okul Türü Bakımından Karşılaştırılması*. [Investigation of peer bullying among different type of high schools]. Paper presented at the 8<sup>th</sup> National Counseling and Guidance Congress. İstanbul: Marmara University (21–23 September 2005), Turkey.
- Pişkin, M. & Ayas, T. (2007). *Akran Zorbalığı Belirleme Ölçeği Ergen Formunun geliştirilmesi*. [Development of Peer Bullying Scale – Adolescent Form]. Paper presented at the 9th National Counseling and Guidance Congress. (Dokuz Eylül University, İzmir: 17–19 October 2007), Turkey.
- Pişkin, M. & Ayas, T. (in Press). Lise öğrencileri arasındaki zorbalık olaylarının cinsiyet, sınıf düzeyi ve okul türü bakımından incelenmesi [Investigation of bullying among high school students with regard to sex, grade level and school type]. *Elementary Education Online*.
- Pişkin, M. & Ayas, T. (2011). Akran Zorbalığı Ölçeği: Çocuk Formu. [Peer Bullying Scale: Child Form]. *Akademik Bakış Dergisi*, 23, 1-12.
- Price, D. A. (2004, September). No need to fear: Ending bullying in U.S. schools. Presented at International Policy and Research Conference on School Bullying and Violence, Stavanger, Norway.
- Rigby, K. (2007). *Bullying in Schools: and what to do about It*. Camberwell: ACER Press
- Rivers, I., & Smith, P. K. (1994). Types of bullying behavior and their correlates. *Aggressive Behavior*, 20, 359–368.
- Şahin, M. & Sarı, S. V. (2010). Ergenlerde görülen zorbalık eğiliminin bilişsel çarpıtmalar ve fonksiyonel olmayan tutumlarla ilişkisi. *Akademik Bakış Dergisi*, 20, 1-14.
- Sharp, S. & Smith, P. K. (1994). *Tackling Bullying in Your School: A Practical Handbook for Teachers*. London: Routledge.
- Smith, P.K. & Sharp, S. (1994). *School bullying: Insights and Perspectives*. London: Routledge.
- Smith, P. K. & Sharp, S. (2003). *School Bullying: Insight and Perspectives*. London: Routledge.
- Social Care Institute of Excellence (2005). Deliberate self-harm among children and adolescents: Who is at risk and how is it recognized? Retrieved 2007 from <http://www.scie.org.uk/publications/briefings/briefing16/index.asp>.
- Stavrinides, P., Paradeisiotou, A., Tziogouros, C. & Lazarou, C. (2010). Prevalence of bullying among Cyprus elementary and high school students. *International Journal of Violence and School*, 11, 114-128.
- Takış, Ö. (2007). *Orta Öğretim Kurumları İçin Geliştirilen Zorbaca Davranışlarla Baş Edebilme Programının Etkisinin İncelenmesi* [Investigation the effectiveness of bullying intervention program developed for high school students] (Unpublished master's thesis). Ankara University, Ankara, Turkey.
- Teachsafeschools.org. (n.d.). How widespread is bullying? Available at [www.teachsafeschools.org/bully\\_menu1.html#4](http://www.teachsafeschools.org/bully_menu1.html#4).
- Whitney, I. & Smith, P. (1993) 'A survey of the nature and extent of bullying in junior/middle and secondary schools', *Press Educational Research*, Vol 35, No 1, Spring.